

WHAT IS CLAIMED IS:

1. A method for optimizing a tour having a first segment with an origination point and a destination point and a second segment with an origination point and a destination point, comprising:
  - receiving first load data about a first load and second load data about a second load;
  - evaluating a fit of the first load data on the first segment and a fit of the second load data on the first segment;
  - evaluating a fit of the first load data on the second segment and a fit of the second load data on the second segment;
  - ranking the relative fits of the first load data and the second load data against the first segment on a first segment list;
  - ranking the relative fits of the first load data and the second load data against the second segment on a second segment list;
  - assigning the load having the highest ranking fit from the first segment list to the first segment and removing that load from the second segment list; and
  - assigning the load having the highest ranking fit from the second segment list to the second segment.
2. The method of claim 1, wherein evaluating the fit of the first load data further comprises evaluating key parameters of the first load data, wherein the key parameters include one or more of a time criteria, a distance criteria, and a savings criteria.
3. The method of claim 2, wherein evaluating the fit of the first load data further comprises:
  - checking a latest ready delivery date of the first load data against the first segment's estimated end date; and

if the latest ready delivery date is greater than the estimated end date, setting the first load as unfit for assignment to the first segment.

4. The method of claim 2, wherein evaluating the fit of the first load data further comprises:

checking a latest load ready date of the first load data against the first segment's estimated start date; and

if the latest load ready date is less than the estimated start date, setting the first load as unfit for assignment to the first segment.

5. The method of claim 2, wherein the distance criteria include one or more of a segment deadhead criteria, load deadhead criteria, and tour mileage criteria.

6. The method of claim 5, wherein evaluating the fit of the first load data further comprises:

computing the segment deadhead resulting from assigning the first load to the first segment; and

if the computed segment deadhead is greater than the segment deadhead criteria, setting the first load as unfit for assignment to the first segment.

7. The method of claim 5, wherein evaluating the fit of the first load data further comprises:

computing the total tour deadhead that would result from assigning the first load to the first segment; and

if the computed total tour deadhead is greater than the load deadhead criteria, setting the first load as unfit for assignment to the first segment.

8. The method of claim 5, wherein evaluating the fit of the first load data further comprises:

computing the total tour mileage that would result from assigning the first load to the first segment; and

if the computed total tour mileage is greater than the tour mileage criteria, setting the first load as unfit for assignment to the first segment.

9. The method of claim 2, wherein evaluating the fit of the first load data further comprises determining a savings criteria for the first load data against the first segment.

10. The method of claim 9, wherein evaluating the fit of the first load data further comprises:

determining a common carrier cost for putting the first load on a common carrier;

determining a dedicated cost for putting the first load on the first segment; and setting the savings criteria as the difference between the common carrier cost and the dedicated cost.

11. A method for optimizing a plurality of tours, each tour comprising a plurality of segments, the method comprising:

- receiving a plurality of loads, wherein each load may be assigned to a segment of a tour;
- placing the plurality of received loads in an available load pool;
- assigning a load from the available load pool to each respective segment of a first tour from the plurality of tours in order to optimize the total cost savings of the first tour;
- removing the assigned loads from the available load pool; and
- repeating the assigning and removing stages for each of the remaining plurality of tours for which the assigning stage has not been performed.

12. A method for optimizing a plurality of tours, each tour comprising a plurality of segments, the method comprising:
- receiving a plurality of loads, wherein each load may be assigned to a segment of a tour;
  - placing the plurality of received loads in an available load pool;
  - assigning a load from the available load pool to each respective segment of a first tour from the plurality of tours in order to optimize the total cost savings of the whole of the plurality of tours; and
  - repeating the assigning stage for each of the remaining plurality of tours for which the assigning stage has not been performed.

13. A method for scratch optimizing a plurality of loads, comprising:
- receiving a plurality of loads;
  - placing the plurality of received loads in an available load pool;
  - creating a tour, having one or more segments, based on the available load pool;
  - assigning a load from the available load pool to each respective segment of the created tour in order to optimize the cost savings of the created tour; and
  - removing the assigned loads from the available load pool.

14. A system for optimizing a tour having a first segment with an origination point and a destination point and a second segment with an origination point and a destination point comprising:

a memory; and

a microprocessor coupled to the memory and programmed to:

receive first load data about a first load and second load data about a second load;

evaluate a fit of the first load data on the first segment and a fit of the second load data on the first segment;

evaluate a fit of the first load data on the second segment and a fit of the second load data on the second segment;

rank the relative fits of the first load data and the second load data against the first segment on a first segment list;

rank the relative fits of the first load data and the second load data against the second segment on a second segment list;

assign the load having the highest ranking fit from the first segment list to the first segment and removing that load from the second segment list; and

assign the load having the highest ranking fit from the second segment list to the second segment.

15. The system of claim 14, wherein evaluating the fit of the first load data further comprises evaluating key parameters of the first load data, wherein the key parameters include one or more of a time criteria, a distance criteria, and a savings criteria.

16. The system of claim 15, wherein the microprocessor is further programmed to:

check a latest ready delivery date of the first load data against the first segment's estimated end date; and

if the latest ready delivery date is greater than the estimated end date, set the first load as unfit for assignment to the first segment.

17. The system of claim 15, wherein the microprocessor is further programmed to:

check a latest load ready date of the first load data against the first segment's estimated start date; and

if the latest load ready date is less than the estimated start date, set the first load as unfit for assignment to the first segment.

18. The system of claim 15, wherein the distance criteria include one or more of a segment deadhead criteria, load deadhead criteria, and tour mileage criteria.

19. The system of claim 18, wherein the microprocessor is further programmed to:

compute the segment deadhead resulting from assigning the first load to the first segment; and

if the computed segment deadhead is greater than the segment deadhead criteria, set the first load as unfit for assignment to the first segment.

20. The system of claim 18, wherein the microprocessor is further programmed to:

compute the total tour deadhead that would result from assigning the first load to the first segment; and

if the computed total tour deadhead is greater than the load deadhead criteria, set the first load as unfit for assignment to the first segment.

21. The system of claim 18, wherein the microprocessor is further programmed to:

compute the total tour mileage that would result from assigning the first load to the first segment; and

if the computed total tour mileage is greater than the tour mileage criteria, set the first load as unfit for assignment to the first segment.



22. The system of claim 15, wherein the microprocessor is further programmed to determine a savings criteria for the first load data against the first segment.

23. The system of claim 22, wherein the microprocessor is further programmed to:

determine a common carrier cost for putting the first load on a common carrier;

determine a dedicated cost for putting the first load on the first segment; and  
set the savings criteria as the difference between the common carrier cost and the dedicated cost.

24. A system for optimizing a plurality of tours, each tour comprising a plurality of segments comprising:

- a memory; and
- a microprocessor coupled to the memory and programmed to:
  - receive a plurality of loads, wherein each load may be assigned to a segment of a tour;
  - place the plurality of received loads in an available load pool;
  - assign a load from the available load pool to each respective segment of a first tour from the plurality of tours in order to optimize the total cost savings of the first tour;
  - remove the assigned loads from the available load pool; and
  - repeat the assigning and removing stages for each of the remaining plurality of tours for which the assigning stage has not been performed.

25. A system for optimizing a plurality of tours, each tour comprising a plurality of segments comprising:

- a memory; and
- a microprocessor coupled to the memory and programmed to:
  - receive a plurality of loads, wherein each load may be assigned to a segment of a tour;
  - place the plurality of received loads in an available load pool;
  - assign a load from the available load pool to each respective segment of a first tour from the plurality of tours in order to optimize the total cost savings of the whole of the plurality of tours; and
  - repeat the assigning stage for each of the remaining plurality of tours for which the assigning stage has not been performed.

26. A system for scratch optimizing a plurality of loads, comprising:  
a memory; and  
a microprocessor coupled to the memory and programmed to:  
receive a plurality of loads;  
place the plurality of received loads in an available load pool;  
create a tour, having one or more segments, based on the available load pool;  
assign a load from the available load pool to each respective segment of the  
created tour in order to optimize the cost savings of the created tour; and  
remove the assigned loads from the available load pool.

27. An article of manufacture containing instructions for optimizing a tour having a first segment with an origination point and a destination point and a second segment with an origination point and a destination point, the instructions being capable of causing a processor to:

receive first load data about a first load and second load data about a second load;

evaluate a fit of the first load data on the first segment and a fit of the second load data on the first segment;

evaluate a fit of the first load data on the second segment and a fit of the second load data on the second segment;

rank the relative fits of the first load data and the second load data against the first segment on a first segment list;

rank the relative fits of the first load data and the second load data against the second segment on a second segment list;

assign the load having the highest ranking fit from the first segment list to the first segment and removing that load from the second segment list; and

assign the load having the highest ranking fit from the second segment list to the second segment.

28. The article of manufacture of claim 27, wherein the instructions are further capable of causing a processor to evaluate key parameters of the first load data, wherein the key parameters include one or more of a time criteria, a distance criteria, and a savings criteria.

29. The article of manufacture of claim 28, wherein the instructions are further capable of causing a processor to:

check a latest ready delivery date of the first load data against the first segment's estimated end date; and

if the latest ready delivery date is greater than the estimated end date, set the first load as unfit for assignment to the first segment.

30. The article of manufacture of claim 28, wherein the instructions are further capable of causing a processor to:

- check a latest load ready date of the first load data against the first segment's estimated start date; and
- if the latest load ready date is less than the estimated start date, set the first load as unfit for assignment to the first segment.

31. The article of manufacture of claim 28, wherein the distance criteria include one or more of a segment deadhead criteria, load deadhead criteria, and tour mileage criteria.

32. The article of manufacture of claim 31, wherein the instructions are further capable of causing a processor to:

- compute the segment deadhead resulting from assigning the first load to the first segment; and
- if the computed segment deadhead is greater than the segment deadhead criteria, set the first load as unfit for assignment to the first segment.

33. The article of manufacture of claim 31, wherein the instructions are further capable of causing a processor to:

- compute the total tour deadhead that would result from assigning the first load to the first segment; and
- if the computed total tour deadhead is greater than the load deadhead criteria, set the first load as unfit for assignment to the first segment.

34. The article of manufacture of claim 31, wherein the instructions are further capable of causing a processor to:

- compute the total tour mileage that would result from assigning the first load to the first segment; and
- if the computed total tour mileage is greater than the tour mileage criteria, set the first load as unfit for assignment to the first segment.

35. The article of manufacture of claim 28, wherein the microprocessor is further programmed to determine a savings criteria for the first load data against the first segment.

36. The article of manufacture of claim 35, wherein the instructions are further capable of causing a processor to:

determine a common carrier cost for putting the first load on a common carrier;

determine a dedicated cost for putting the first load on the first segment; and  
set the savings criteria as the difference between the common carrier cost and the dedicated cost.

37. . . . An article of manufacture containing instructions for optimizing a plurality of tours, each tour comprising a plurality of segments, the instructions being capable of causing a processor to:

receive a plurality of loads, wherein each load may be assigned to a segment of a tour;

place the plurality of received loads in an available load pool;

assign a load from the available load pool to each respective segment of a first tour from the plurality of tours in order to optimize the total cost savings of the first tour;

remove the assigned loads from the available load pool; and

repeat the assigning and removing stages for each of the remaining plurality of tours for which the assigning stage has not been performed.



38. An article of manufacture containing instructions for optimizing a plurality of tours, each tour comprising a plurality of segments comprising:

- receive a plurality of loads, wherein each load may be assigned to a segment of a tour;
- place the plurality of received loads in an available load pool;
- assign a load from the available load pool to each respective segment of a first tour from the plurality of tours in order to optimize the total cost savings of the whole of the plurality of tours; and
- repeat the assigning stage for each of the remaining plurality of tours for which the assigning stage has not been performed.

39. An article of manufacture containing instructions for scratch optimizing a plurality of loads, the instructions being capable of causing a processor to:

- receive a plurality of loads;
- place the plurality of received loads in an available load pool;
- create a tour, having one or more segments, based on the available load pool;
- assign a load from the available load pool to each respective segment of the created tour in order to optimize the cost savings of the created tour; and
- remove the assigned loads from the available load pool.